THE HISTORY OF MONEY
From Its Origins to Our Time

This was the final draft of the English text of "Une Histoire de l'Argent: des origines à nos jours" - www.autrement.com/ouvrages.php?ouv=2746710306 - published by Autrement in Paris in November 2007 with a few minor changes in the final French text. I am very grateful to Philippe Godard - www.autrement.com/collections.php?col=277 - for his editorial support, and to Autrement for allowing me to make the English version accessible here.

INTRODUCTION

This book is about the history of money: how did it begin? how has it evolved to the present day? what has it enabled humans to achieve? and why do so many people in the world today have problems with it and suffer from the way it works? The book is also about the future: how may money develop further? how might we want it to develop?

Humans are the only creatures that use money. Animals and birds and insects and fishes and plants exist together in the world without it. But in human societies the earning and spending of money has become one of the most important ways we connect with one another. Most of us have to have money. We need to get enough coming in to match what we need to pay out. We all need to understand at least that much about money. But there is more to it than that.

Over the centuries, money has reflected changes in politics and government, in economic life and power, in science and technology, in religious and other cultural beliefs, in family and neighbourhood life, and in other aspects of how we live. And it has not just reflected those changes; it has also helped to bring them about.

Knowing something about how that has happened can help us to see how the role of money in people's lives may continue to change, and how we think it should change, as an aspect of the future of our "global village". For young people growing up in the early 21st century this could be more important than ever before.

CHAPTER 1
Prehistoric Times and the Birth of Coins

Like many Inuits in North-West Canada, Pierre Tlokka lived by hunting. In 1970 a big company planned to build an oil pipeline through his hunting grounds. He was asked if that would hurt him. He answered, "Yes. The white people always have some money in the bank. But I never have any money in the bank. The only bank I can imagine is the wild animals living in Nature where I can hunt them. That's my bank. That's my savings account right there".

Money may have played some part in Pierre Tlokka's life - for buying a gun perhaps. But what he said takes us back to the Bible story of Adam and Eve in the Garden of Eden. There is no mention of money there. Adam and Eve got everything free from Nature. So did prehistoric people for thousands of years.

Money gradually developed out of various different features of early societies, such as ceremonies and feasts, or compensation for killing a man or a bride-price for marrying a woman. Objects of gold and silver were used in religious activities, as sacrifices and gifts to gods and priests and priestesses. They were also used to pay tribute to kings in Babylon and Pharaohs in Egypt. Bank accounts are a key feature of our money system today. Their origin and the origin of writing arose from the need to keep accounts of the grain and other commodities deposited in royal palaces and temples. Clay tablets from Babylon have been found recording some of these accounts before 3000 BC, well over a thousand years before objects like primitive coins began to be used.

Most scholars who study early human societies, like archaeologists and anthropologists, emphasise these social, religious and political origins of money. But others have thought that money was invented to help trade. One of them was Adam Smith, the Scottish philosopher who visited Voltaire and is often thought of as the father of modern economics. In his book *The Wealth of Nations*, published in 1776, he notes that human nature has "a propensity to truck, barter and exchange" which is "to be found in no other race of animals". The desire to exchange things is part of human nature. It goes with the "division of labour" as different people specialise in different skills and jobs and careers. According to this view, money came into existence to meet the need for a means of exchange more efficient than barter.

In order to barter, you have to find someone who wants what you are offering, say a loaf of bread, and is at the same time offering something you want, say a joint of meat; and then you have to agree that the bread and the meat have roughly the same value. Adam Smith instances a butcher and a brewer and a baker. They are all glad to accept the other articles in exchange for the meat or beer or bread which they themselves produce, provided that they need them at the same time. But often things are not as convenient as that. At some point in the development of ancient societies people began to recognise that simple bartering can be cumbersome and slow. If there were some special thing which would be accepted at any time in exchange for any article, that would make the process easier and quicker. That special thing would be money.

Before metal coins were invented, ways to pay for things took many forms; hundreds of objects were used as money. In ancient societies of the Mediterranean and Near East they included wheat and barley and cattle. Cowrie shells and bronze and copper copies of them have been used more widely and for longer than any other form of money, from 1600 BC in China to the 20th century AD in Africa. Most unusual are the Yap stones, large cartwheels of carved stone which Yap Islanders in the Pacific were still using in the 1960s as symbols of wealth to be exchanged between villages - as ceremonial gifts, payments for building houses and canoes, arranging marriages, and for permissions to fish in each others waters. In the seventeenth century AD, people accepted wampum (white beads made from clam shells) as money in the US state of Massachusetts and it was widely used in trade with indigenous Americans ("Indians"). Even for a time in the 1940s, people used cigarettes as money in parts of Germany devastated by the Second World War. It is difficult to define exactly what money is. But the great variety of these means of payment shows that money can be whatever people will generally accept in exchange for other things.

The Birth of Coins

A thousand years after people in China used bronze and copper copies of cowrie shells as primitive coins, the first proper money, as we think of it now, was the gold and silver coins of the 6th century BC. These were produced by the Greeks in Ionia, in the Western part of modern Turkey not very far from the city of Ephesus. In ancient Greek myth and history two kings in that region, Midas and Croesus, were famous for their gold and riches.

According to myth, Midas did a favour for Bacchus, the god of wine. In return Bacchus gave him a wish: whatever Midas wished would come true. Midas foolishly wished that everything he touched would turn into gold. He got what he wished. Even his food and wine became gold as he tried to eat and drink. Finally, when he hugged his daughter for comfort, she became a gold statue. So Midas begged Bacchus to cancel his wish. Bacchus agreed and told Midas to wash it away in the river Pactolus. He did, and brought his daughter back to life by bathing her golden statue in the river too. According to the myth, that is why the banks of that river are covered with gold.

Although the story of Midas is a myth, the 5th-century Greek historian Herodotus and very recent archaeological research confirm that Midas was a real historical king, probably in the 8th century; and the alluvial gold in the river Pactolus was real.

The wealth and power of Croesus were so great that we still say a very wealthy person is "as rich as Croesus". Herodotus tells us about his life, including the enormous number of gold and silver bowls and statues he presented to the god Apollo and the oracle at Delphi. Solon, the wise 6th-century law-giver from Athens, visited him. Croesus asked Solon "Who is the happiest man you have ever seen?" - hoping the answer would be "You, of course". But, instead, Solon spoke to Croesus of men who had led good lives and met noble deaths. When he said to Croesus "Call no man happy until he is dead", Croesus sent him away.

Later Croesus suffered terrible disasters. His favourite son was killed accidentally by a friend hunting a boar. The oracle at Delphi told him that if he attacked King Cyrus of Persia, he would destroy a great empire. Croesus did attack Cyrus, but it was Croesus who was defeated and whose empire was destroyed; and the oracle claimed it had meant his empire, not Cyrus's, was the one that would be destroyed.

The lesson drawn by later thinkers from the stories of Midas and Croesus is that too much wealth and money can blight our lives, and even be a sin. This idea comes up regularly in the history of money. Today, and for the future, we need to ask: what part should money play in our lives and in our world society?

CHAPTER 2
Ancient Greece and Rome

After 600 BC, gold and silver coins spread through the city states of Greece, stamped with the emblems of their cities. As Athens grew in power and wealth, its beautiful coins of silver from the mines of Laurion became widely used. They were called "owls of Minerva" because they pictured an owl on one side. Minerva was the Roman name for the Greek goddess Athene. A myth tells of Athene's dramatic birth in full armour from the head of her father, Zeus. She became the guardian goddess of Athens. Because there were many owls there, the owl became her symbol and the emblem of Athens itself. In Rome coins were minted in the temple of a different goddess, Juno Moneta -

the origin of our words "money" and "monnaie".

Power, Money, Land and Debt

Throughout history, the people who have had most power have almost been rich. At the height of her empire in the 5th century BC, Athens forced all her allies to use owl-of-Minerva coins; and all Athenian citizens had to hand over foreign coins to be recycled into owls of Minerva. This was profitable for Athens. Anyone who creates new money makes a profit from the difference between its value and the cost of producing it, unless they give it away. That is because people must either provide goods or services - such as their work - in order to get it, or pay interest for borrowing it. That applies to countries, as to people. Any country whose money is used by others makes a profit, as the USA does today from other countries having to use the US dollar as the main international currency. That is one feature of today's international economy that many people think is unfair.

Powerful people had always owned most land, but the increasing use of money helped them to get even more. A bad harvest meant that many peasants had to borrow corn from better-off people. Previously, when the next harvest came they would pay back their debt with corn they had grown. But when money came into existence, borrowers had to borrow money to buy what they needed, and to pay back the debt in money after selling their own next harvest. Another bad harvest might mean many still had no money and be forced to hand over their land to pay their debt.

Something like this still happens today. Most people have to borrow money from a bank or a building society to buy a house. Sometimes they run into trouble before they have paid the money back. They may lose their job, so that they cannot afford to pay the regular payments on their debt. In what is called a "down turn" in the economy, that can happen to thousands of people through no fault of their own. If they are not able to pay back the borrowed money, the bank or building society can take over their house and sell it to someone else.

Solon was appointed lawgiver in Athens about 600 BC to do something for the peasant farmers who were getting more and more deeply into debt. More and more of them were having to hand over their land to rich landowners and even to hand themselves over as slaves, sometimes to be sold abroad. Solon's reforms were known as "Seisactheia", the Greek word for "shaking off the burdens".

What Solon was trying to do is an example of "jubilee". According to the Old Testament, God told Moses that when the people of Israel had settled in their promised land, they should proclaim a jubilee year every fifty years - a year to be joyful. Debts should be forgiven, everyone who had lost their land should have it back, and every citizen who had become a slave should be freed. "Clean Slate" proclamations like this were issued from time to time in Babylon and other ancient societies too.

A few years ago Jubilee 2000 revived this idea. A worldwide campaign of over 20 million people urged world leaders to celebrate the Year 2000 by cancelling $100 billion of debts which poor countries owed to rich ones. The campaign made a big impact and since then some debts of the poorest countries have been cancelled. But whether it will prevent them going deeper into debt again is doubtful, owing to the trading and financial handicaps suffered by those countries in an international economy which many people think is organised to favour the rich ones.

Ancient Rome

As ancient Rome expanded its rule over the whole of Italy and Greece and most of the then-known world, it became much richer than Greece had been. The Romans developed a sophisticated banking system, linked to the network of tax collectors throughout the Roman Empire. Some Roman citizens became as rich as today's multi-billionaires. Pompey the Great, who married Julius Caesar's daughter and was later defeated by him in the great Civil War (49-48 BC), owned so much land that he could raise an army from among his tenants to fight for him. Another military general and governor of provinces who made a huge fortune was Crassus. He lived at the same time as Caesar and Pompey, but was a little older than them. He owned silver mines, and bought up land estates owned by victims of the civil wars, including people who had been proscribed as "enemies of the state" by the dictator Sulla in 80BC. He also came to own a large part of the city of Rome by buying houses when he heard they were on fire and therefore cheap, and bringing in his followers to put the fires out before they had done too much damage.

Seven hundred years after the mythical beginning of coins in Greece, a more down-to-earth story is told of a Roman emperor. Vespasian (70-79 AD) built many famous buildings, including the Colosseum which can still be seen in Rome today. But in his time he was best known for his simple way of life and his skill at managing taxes and other government activities. One day his son Titus criticised him for taxing public toilets. Vespasian's answer was to hold the first coin from the new tax to Titus's nose and say, "It smells alright doesn't it, in spite of where it comes from?". This story has often been quoted to illustrate that the value of the money people possess does not depend on how they got it.

Although ancient Greece and ancient Rome were very different, they both show that in most societies there is a tendency for a powerful minority to take control of most of the money and land. A big change, like a war or a revolution or an outstanding leader, may help to make people more equal for a time. But a growing gap between a rich land-owning minority and a poor landless majority can bring about a society's eventual collapse. Something of that kind happened to the Roman Empire. As the city of Rome became more and more crowded with thousands of poor landless people who could not earn a livelihood for themselves, writers of the time - like Pliny (23-79 AD) and Juvenal (60-130 AD) - observed that the great landed estates were destroying the country. The only thing many Roman citizens now cared about was to be given free "bread and circuses". When, in the following centuries, waves of Franks, Vandals, Huns, Goths and other tribes from Northern Europe and Asia overran its boundaries, the Roman Empire gradually broke up. The "Dark Ages" followed.

CHAPTER 3
Kings and Rulers

The Emperor Charlemagne (742-814) minted coins of silver dug from mines in Germany by slaves who were worked to death. These coins were modelled on the old Roman "denarius". In France "denier" coins were used until the French Revolution. In Britain pounds, shillings and pence were used until the 1970s; the shorthand for them was £sd; and the "d" still stood for denarius.

In spite of this link with the Roman past, the feudal societies that emerged from the Dark Ages were organised around land, rather than money. Dukes and barons and other nobles owed services to their king in exchange for their lands. Lower landowners owed services to those above them. At the bottom of the ladder, farmers and villagers and serfs owed services to their local landlords. An important service to the king was to provide men for his armies. Apart from military service, farmers and villagers and serfs had to give their landlords a share of the produce from their land - meat, cloth, wheat, fruit, and so on - and also do certain kinds of work on their estates, like building roads, cutting trees, and harvesting and transporting crops.

Over the centuries the obligation to provide goods and services was gradually replaced by money. Subjects should pay taxes to kings and rulers, people should pay rents to their landlords, and people should get wages for working. In general, the importance of money in almost all aspects of life has continued to grow right up to the present time. It has brought freedom and wellbeing for many people, but it has damaged and destroyed the lives of many. Some people think we have now become too dependent on employers to organise our work and provide our incomes. They suggest we should all receive a "citizen's income", as our share in the value of common resources like land.

As countries like France, England and Spain developed into nations, their rulers strengthened their control over money. Some of the most important activities of democratic governments today have grown out of that. They are:
1) supplying money for everyone to use ;
2) collecting money as public revenue by taxing us and charging us in various ways, so that they can spend it on our behalf;
3) deciding what to spend it on, and managing its spending for us.

All these activities have grown up higgledy piggledy over time. Some people think they should now be reshaped as a system better designed to meet people's needs in today's more democratic world.

Providing Society with Money

Money can be created in various ways. Rulers have minted it as coins for themselves to spend. Bankers have created it to lend to their customers, either as banknotes or simply by writing it into their customers' accounts as "credit"; and members of local groups can themselves create money in "alternative" currencies in exchange for goods and services provided by other members of their group. In every case, whoever creates new money benefits from doing so. One question people are asking today is, Who should profit from creating money in official currencies like the euro and the dollar and the pound?

In medieval times providing the money supply meant minting coins and putting them into circulation by spending them. The power and wealth of a ruler depended partly on whether his money was widely used by people in his own and other countries. In the 13th century King Louis IX of France (St. Louis) issued an edict that his coins should be used for making payments throughout the kingdom - much as the Athenian government had ordered in the 5th century BC. Rulers profited from producing coins of greater value than the cost of producing them. The profit was called seigniorage. It still applies today to part of the money supply. For example, the European Central Bank spends much less on manufacturing euro coins and banknotes than their value as money. That creates a profit which the ECB distributes to Eurozone member governments. But today coins and banknotes make up only a small part of the money supply.

Rulers were able to increase their profits by reducing the value of the gold or silver contained in the coins. This was known as "debasing the coinage". Henry VIII of England (1509-1547) did it. What most of us remember about him is that he had six wives, replaced the Pope as head of the Church of England, and "dissolved" the monasteries and took possession of them himself. But he also got the nickname "Old Copper-nose". He made everyone exchange their silver coins for new copper coins, covered with a thin surface of silver to make them look genuine. But the silver wore off the King's nose on the coins and people saw he had cheated them. Debasing the currency has been one way of deceiving people about money. Other tricks became more important as paper money and electronic money became more important than coins.

People Don't Like Taxes

Taxes originated as tribute to rulers and priests in prehistoric societies. They are as old as money itself. After the Dark Ages, rulers revived taxes to provide them with money to spend on wars, building roads and other purposes - including spending on their palaces, servants, entertainments, and all their personal expenses. Only later when democracies emerged did people begin to think that public spending on the needs of society should be distinct from private spending on the personal needs of rulers.

Taxes have always been unpopular, which is why rulers have looked for other ways of raising money, like debasing the coinage, seizing the wealth of monasteries, and borrowing money. As early as the 14th century a businessman in Florence told his sons, "Avoid falsehoods like the plague - except to escape taxes, because then you are not lying to take someone else's goods but to prevent your own from being unjustly seized".

In the Middle Ages harsh taxes caused many revolts of the people, like the Jacquerie in the Isle-de-France in 1358, the peasants' revolt led by Wat Tyler against a poll-tax in England in 1381, and the communes' revolt against a salt-tax in Guyenne in 1548.

Those revolts were pitilessly put down and their leaders were executed. More successful tax revolts later by wealthier people helped to change the course of history. In England, property owners protesting against King Charles I's ship-tax - to get money for his navy - started the Civil War which led to his execution in 1649. In America in the 1770s, resistance to unfair taxation helped to cause the War of Independence. A tax on American importers of tea but not British ones, had given British importers an unfair advantage. In Boston on the evening of 16 December 1773 a hundred and fifty men, pretending to be Mohawk Indians, boarded three British ships, broke open the tea chests, and threw them into the harbour. As news of the "Boston Tea Party" spread, similar acts of resistance elsewhere led to war, which the Americans won.

Since then "No taxation without representation" has been an important principle of democracy: people should only have to pay taxes which have been agreed by their elected representatives.

CHAPTER 4
Trade, Banking and Paper Money

In the 12th and 13th centuries Christian armies from all over Europe joined one another in Crusades to capture Jerusalem from the Muslims. One of the results was increasing trade between their countries and between Europe and other parts of the world.

The growth of trade brought wealth to Italian cities like Venice and Genoa and Florence, situated between the spices and silks of Asia and the people of northern Europe who wanted them. More trade meant more borrowing by merchants, like Antonio in Shakespeare's The Merchant of Venice, to pay the costs of trading until the profits came in. Exchange of currencies also grew - for example by merchants from Italy needing to change sous from sales of Italian wool in France into ducats to spend at home preparing future trading expeditions.

So banking and money-changing became more important and profitable. The most famous bankers were from Florence. By the 15th century Cosimo de Medici had built up a multinational bank with branches in Avignon, Bruges and London and various Italian cities. He became ruler of Florence. He and his grandson Lorenzo the Magnificent commissioned numerous buildings and works of art by Renaissance masters like Brunelleschi, Botticelli and Michelangelo, and turned Florence into the beautiful city which it still is today.

Paper Money

Paper money had been used in China for many years. When Marco Polo returned to Venice from China in 1295, he described in his book The Travels of Marco Polo how Kublai Khan's government issued paper notes authenticated by his officials. Everyone throughout China was compelled to accept them as money, and anyone who counterfeited them was sentenced to death. Being able to create unlimited amounts of paper money gave the Great Khan more power to control economic life in his country than rulers in Europe had. They depended on having enough gold and silver to mint coins. Economic life flourished in China at that time.

Marco Polo's book encouraged bankers in Europe to use paper for money. From the 13th century paper "bills of exchange" helped merchants and bankers to do business in different places. Instead of carrying heavy loads of various kinds of coins with him, a merchant could buy a paper bill of exchange from his banker before he set out. It would instruct the banker's agent in another city to pay the merchant a certain sum of money in that city's currency on a certain day in the future, so that he would have the right money to spend when he got there.

Bankers and goldsmiths also gave paper notes as receipts and "promises to pay" to customers who had deposited coins and gold and silver with them for safekeeping. In the course of time, people began to pass on these bankers' notes to one another as a convenient means of payment. Over the following centuries the notes became a widely accepted substitute for money, and eventually they were recognised as actual money. That is how banknotes came into existence.

For several centuries banknotes continued to be linked to the value of gold and silver, and gold and silver coins. In France, for example a ten franc banknote represented a weight of gold worth ten francs. Because the link with gold no longer now exists, a Euro note today simply says "10 EURO". [But British banknotes still remind us of the link; for example a £10 note says "I promise to pay the bearer on demand the sum of £10". Of course, If you presented a £10 note at the Bank of England today and demanded the promised weight of gold, they would think you crazy. All you would get in exchange would be another £10 note.]

The top Jesuit priest in the 16th century said the merchants and bankers "have so many tricks for inventing ingenious practices that we can hardly see what is going on at the bottom of it all". Until then the tricks were mostly designed to conceal that the bankers were lending money for interest, which was a sin according to Christian teaching. But as that teaching changed and bankers were able to profit openly from lending money for interest, they learned a new trick - how to create money out of nothing in order to lend it.

This is how they did it. Their experience as bankers showed them that, with their paper banknotes circulating as means of payment, they were seldom asked to pay out more than a fraction of the gold which their customers had deposited with them. So they realised they could lend more money in the form of paper banknotes than the value of the gold they held. The interest the banks got from lending paper banknotes was much greater than the cost of printing them, so lending them was very profitable. However, if bank customers rightly suspected that a bank had lent too much paper money, they all rushed to the bank to get back their gold money, it wasn't there, the bank collapsed and many customers lost their money altogether.

For many years people argued that banks should not be allowed to create new money as banknotes. The second US president, John Adams (1797-1801), said that every dollar issued as bank notes beyond the quantity of gold and silver held by a bank "represents nothing, and is therefore a cheat upon somebody". The more famous president, Abraham Lincoln (1861-1865), agreed; some people say it was why he was assassinated. Today central banks like the European Central Bank have taken over the printing of banknotes on behalf of governments. But the commercial banks have learned a new trick. Electronic money in people's computerised bank accounts has now replaced banknotes as the largest part of the money supply. The commercial banks now create it simply by writing profit-making loans into their customers' accounts. Today's reformers say electronic money should now be issued on behalf of governments, as coins and banknotes are.

Spanish Gold and Silver

Until the 20th century the use of paper money did not solve the need for more money to finance the growth of trade. Except in China, people still thought the value of paper money depended on being able to exchange it for gold or silver coins or bullion.

In 1492 Columbus sailed to America hoping to find a westward route to the gold and silver of the Far East. In fact, he opened the way for Spanish conquistadors like Cortes and Pizarro to plunder huge quantities of those precious metals from the Aztecs in Mexico and Incas in Peru. These indigenous peoples could not understand Europeans' violent, insatiable greed for gold and silver; one tribe killed a captured Spanish captain by pouring molten gold down his throat, and said they hoped it would satisfy him. The Spaniards are estimated to have killed about 15 million people there in about 40 years. Many were worked to death in the gold and silver mines.

Large amounts of this Spanish gold and silver were seized at sea by buccaneers from Holland and England like Sir Francis Drake. They circulated widely there and brought productive spending power into northern Europe. This encouraged trade and commerce and helped to shift wealth and power from Italy to North Sea cities like Amsterdam and London. On the other hand, the large amounts that got through to Spain mostly got into the hands of nobles and aristocrats who wasted it on unproductive luxury and show; and this left Spain poorer than before. In Europe as a whole the increased supply of money caused serious inflation - by 1600 money was worth a quarter of its value in 1500, and prices of everything were four times higher. These effects raised questions still discussed now - how does more money affect economic activity? what causes inflation? and should the value of money depend on gold and silver?

CHAPTER 5
TOWARDS MODERN MONEY

The First Central Bank

In 1694 a war being fought by King Louis XIV of France against England triggered an event that became a milestone in the history of money. King William III of England needed huge sums to fight the war and the English Parliament was unwilling to increase taxes. So, with the help of a Scotsman called William Paterson, some City of London businessmen persuaded King William to let them set up a bank to lend him money. As banker to the government it was called the Bank of England, although it was a privately owned commercial bank.

The Bank felt sure of receiving the interest on the loans, because the government would use taxes of future years to pay it. So it lent the money without insisting that the government should pay it back, so long as it continued to pay interest on it. That encouraged the government to borrow more and more. Governments elsewhere in the world have followed suit, and all their countries have steadily built up growing national debts. Taxpayers now have to pay so much interest on what their governments have borrowed, that they pay higher taxes than would otherwise be needed.

Over the next two and a half centuries the Bank of England developed bit by bit from a commercial bank into an agency of the state, and in 1946 it was nationalised. Today, most central banks around the world, including the European Central Bank, are not commercial banks but state agencies.

Bursting Bubbles

Paterson's compatriot, John Law, became a great celebrity. Law had killed a man in London in 1694 in a dispute about a woman and money, and was sentenced to death for murder. He escaped and spent the following years in Scotland, Italy, Holland, Germany, Italy and France - gambling, studying banking schemes, and making money. His big opportunity came in Paris in 1715.

Louis XIV had died leaving the Duc d'Orléans to deal with huge debts and a chaotic financial situation as Regent for Louis' five-year-old great-grandson Louis XV. With the Duke's agreement Law set up a bank which issued its own banknotes. It was so successful that by 1719 he had become Minister of Finance and his bank, now called

"Banque Générale", had taken over the Mississippi settlement of Louisiana in North America and other French overseas trading companies. Law's "System" thus combined issuing money with banking and lending money, managing the national debt, and controlling much of France's overseas trade. It seemed like a sure winner, and in a frenzy to buy its shares Parisians drove their price sky-high. But it had issued so many banknotes and shares that they lost their value and, as people panicked to sell them, the "Mississippi Bubble" burst. In 1720 the System collapsed, many people lost their money, and Law was dismissed and died in Venice nine years later.

In London the Bank of England was lucky to survive its first few years, having also issued too many banknotes. Then in 1719-20 London experienced the South Sea Bubble. So many people swarmed to buy shares in the fraudulent South Sea Company that they drove up the price a hundred times in a few months. They then panicked and all rushed to sell the shares. So the South Sea Bubble burst in London like the Mississippi Bubble burst in Paris. Many people lost all their money, and the government had to resign.

In later years the 18th century philosopher/economist Adam Smith described John Law's French venture as "the most extravagant project both of banking and stock-jobbing that, perhaps, the world ever saw"; Voltaire described it as "a stupendous game of chance, played by an unknown man, and a foreigner at that, against a whole nation"; and Karl Marx, the famous socialist economist who wrote "das Kapital" and was the founder of Communism, described Law as having "the pleasant mixed character of swindler and prophet". John Law was remembered in France seventy years afterwards when so many paper money assignats were issued by the revolutionary government in 1789 that by 1796 they were worth less than the cost of printing them. Later, those two unhappy experiences were so vividly remembered in France that financiers and capitalists resisted the adoption of paper money, which retarded the development of a modern French economy.

Speculating and Gambling

The Mississippi and South Sea Bubbles are examples of the frequent "booms and busts" in the history of money. A rapid rise takes place in the price of something - shares or houses, for example - as people compete to buy them, hoping that their prices will continue to rise and they will become worth more and more. But then, once people realise that the rise can't continue and hurry to sell, the price collapses leaving many people losing their money. These booms and busts often affect things that can provide stores for people's wealth - "assets" like land, gold, silver, jewellery, works of art and other objects of high-value, as well as shares and houses.

The most famous of all booms and busts was the great Wall Street crash of stocks and shares in 1929, followed by the worldwide economic depression of the 1930s that led to the Second World War. Investors had been frantically buying shares with borrowed money, share values had risen spectacularly, many investors had become millionaires (on paper), and had continued to buy, assuming that the "bull market" would continue and that when they sold their shares they would be left with high profits even after paying back their loans. A well known economist of that time stated confidently: "The nation is marching along a permanently high plateau of prosperity." But five days later, people began to doubt whether share prices would stay that high; a self-reinforcing "bear market" set in and prices collapsed, losing $16 billion in value. Bankrupt speculators jumped to their death out of skyscraper windows, hundreds of American banks went bust, and thousands of bank customers lost all their money.

More recently, in the dot.com boom of the 1990s, the shares of computing and internet companies rose to prices far beyond what they could be expected to justify by their profits, and then collapsed. Almost anything can be the subject of boom and bust - like the tulipmania which gripped the citizens of Amsterdam in 1633, when they drove up the price of tulip bulbs beyond all reason before it suddenly collapsed leaving many of them penniless.

As the money system has developed further it has thrown up many new opportunities to make money out of money by complicated forms of betting - on changes in the values of different currencies, for example, and many other forms what are called "derivatives". These enable individuals and companies to gamble with large sums of money which they don't possess, so if the gamble goes wrong they suffer financial disaster. But, although the experts can make money out of these schemes themselves, and claim that by doing so they help to make the money system work more efficiently, other people can lose a lot of money when a gamble goes badly wrong - as when Barings Bank was brought to an untimely end (Chapter 7).

King William of England and the two Scotsmen who explored new ways of dealing with money around 1700 were doing so to serve their own interests, not to provide an efficient system of money for everyone. That has remained true of almost all their successors. Will it continue to be true of those who explore new ways of dealing with money in the more democratic world of the 21st century?

CHAPTER 6
NUMBERS AND ETHICS - IS THERE A CONFLICT?

Money is Numbers

How much are different things worth? Money gives an answer. It puts numbers on value. That has been true of coins and banknotes. But we can see it more clearly now, when most money is disembodied numbers in computerised bank accounts, and most payments are made by transferring numbers electronically from one bank account to another. We can think of the system of money as a network of changing numbers. Some of the numbers are about flows of money - the payments we make by handing over banknotes and coins to someone else or by transferring money from our bank account to theirs. Others are about stocks of money - how much there is in everyone's bank accounts and wallets and purses, resulting from the payments that have flowed to them and from them.

Numbers of all kinds played a much smaller part in medieval people's lives than in ours. Although the regular chiming of monastery bells told the monks when to get up, pray, eat, work and go to bed, most people experienced time directly from the rhythms of the natural world - daylight and darkness, sun and moon, the movements of stars, and the changing seasons - and not from the number of days and hours and minutes on a calendar or clock. Although the builders of medieval cathedrals and other skilled workers measured lengths and heights and weights in numbers, most people's knowledge depended directly on their senses - what they saw and felt and heard and smelled and tasted. Money did exist, but it played a small part in most people's lives and work and dealings with one another.

The scientific revolution of the 16th and 17th centuries greatly increased human understanding of how the natural world works, including the planets and stars. The mathematician Galileo played a big part in it. From then on, knowledge relied more and more on numbers. By the 19th century the scientist Lord Kelvin could say, "When you can measure what you are speaking about, and express it in numbers, you know what you mean; but when you cannot measure and express it in numbers, your knowledge is of a meagre and unsatisfactory kind".

At the same time as numbers became more important in knowledge, money became more important in practical life. People came to use money to measure the value of their work and wealth and time. In "Advice to a Young Tradesman" (1748) Benjamin Franklin, the American printer and statesman, said "Remember that time is money. He that idly loses five shillings' worth of time loses five shillings, and might as prudently throw five shillings into the sea". The difference between the money people earned and the money they spent (their profit or loss) became crucial. As Mr Micawber said in Charles Dickens' novel "David Copperfield" (1849), "Annual income £20, annual expenditure £19.19.6, result happiness. Annual income £20, annual expenditure £20.0.6, result misery".

Economists now use money numbers to measure the value of many things, and to advise people and companies and governments what to do. Some even think of economics as an objective science like other sciences. But money numbers do not measure objective aspects of nature - like length, height, weight, or the data of physics and chemistry. Money numbers provide us with a scoring system for the game of life. Like any scoring system, the money system heavily influences how the game is played - and money numbers influence us particularly because we can use them to buy things. The fact is that the money system has been shaped by human decisions designed to serve particular human purposes. Understanding why it now works as it does. and how it might be improved, does not depend on objective measurement. It depends on deciding what purposes money should serve. That is an ethical decision.

Ethics and Money

Aristotle, one of the great philosophers of ancient Athens (384-322 BC), believed that the natural and proper purpose of money is to enable us to exchange necessities of life - like clothes and food. Our need for most things is limited; we can't wear unlimited clothes or eat unlimited food. But, because money can buy all sorts of different things, some people want unlimited amounts of money, as Midas wanted to turn everything into gold. So they may be tempted to practise usury - to make money out of money by lending it at interest. Aristotle condemned that.

Jesus was furious with the money-changers for polluting the temple in Jerusalem with their haggling, and drove them out of that sacred place. St Aquinas (1225-1274) and other medieval Christian schoolmen and church leaders taught that money must be controlled by the ethics of right and wrong, by what was a just wage for a particular worker or trader and what was a just price for a particular thing. That teaching meant that lending money at interest was a sin. In his epic poem L'Inferno the Italian poet Dante (1265-1321) describes money-lenders wailing in the lowest parts of Hell in their after-life; God had created nature's resources and human work as the two true sources of wealth, so the money-lenders' way of making money - by buying and selling it - was a sin against God. Islamic teaching today still forbids lending money for interest, seeing it as unjust that a lender of money for a project - say, a new shop - doesn't have to do any work to make the shop a success, while the borrower has to bear all the costs if it should fail.

Reasons of religion, race and economic competition caused Jews to be excluded from most professions and occupations in the Middle Ages, but they were not forbidden by their faith to lend money for interest as Christians were. This encouraged many Jews, like Shylock in Shakespeare's Merchant of Venice, to be money-lenders, and it helps to explain why Jews have been active in money matters ever since.

Christian teaching about money changed after the Middle Ages. This followed the growth of commerce and trade, particularly in Northern Europe where the Protestant Reformation against the Catholic Church was strongest. In Germany Martin Luther (1483-1546) preached that useful work in the business of the world was more acceptable to God than the quiet, escapist life of monks in monasteries. John Calvin (1509-1564), who lived among the merchants and townspeople of Geneva, taught that the medieval scholastics were wrong, that condemning usury was out of date, that lending money to support business and trade was fulfilling a productive purpose, and that charging someone for borrowing your money was no worse than charging them for renting your house.

Later Protestants taught that making money was actually a service to God. If you didn't make money when you could, you would be rejecting God's gifts and failing to use them as His steward. This Protestant ethic gave birth to the message of capitalism, that making money is a central purpose of human life. This became particularly influential in Britain and America.

Adam Smith's saying that "it is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own self-interest" has been used to support that message. So has the idea that the "invisible hand" of the market will "match supply with demand" - meaning that, in order to make money, producers will produce for sale what consumers will pay for, and so everyone's needs will be met. Recently this has misled some financial and business people to practice the unethical philosophy "Greed is good, Greed is right, and Greed works" (American financier Gordon Gekko, 1987).

CHAPTER 7
The Industrial Revolution and Britain's Financial Supremacy

The first iron bridge in the world spans the River Severn in Shropshire in England. It was built by Abraham Darby III in 1779. His grandfather, Abraham Darby I (1678-1717), had discovered how to use coal instead of charcoal to make iron. This led to the use of iron to make engines and machines of every kind, and to build railways and ships and factories. It made the Industrial Revolution possible, and that led to Britain becoming the most powerful 19th-century nation, dominating the world's manufacturing, trading and shipping. The pound sterling became the main international currency, with London as the world's financial centre - channelling huge sums of money to governments and companies to invest in projects all over the world.

The Darbys were Quakers, a sect of non-conformist protestants, kept out of university and professional and military jobs because of their religion. The enterprising pioneers of the Industrial Age included many other non-conformist outsiders too, like the families of Barclays and Lloyds. They expanded from brewing and ironmongery into providing banking services for other growing businesses. Two hundred and fifty years later Barclays and Lloyds have become big multinational banks, important players in the global money game.

International Traders and Bankers

Britain's industrial progress benefited from its international trade in two ways. First, trade provided export opportunities, as in the "trading triangle" between Europe, Africa, and America. Ships took textiles, iron, and guns from Britain to Africa and exchanged them for African slaves; they took the slaves to North or South America, and sold them to owners of plantations and mines in exchange for sugar, tobacco, gold and silver; and they brought those back to Europe. This profitable three-way trade peaked between 1740 and 1810. It greatly increased the population and prosperity of the port cities of Liverpool and Bristol, and quickened London's development as the world's financial centre. The second way trade helped industrial progress was that it provided investment money. For example, Quaker friends invested profits from the Bristol trade in the Darbys' ironworks.

The Barings and Rothschilds were also outsiders. They were two families from Germany who came to England, set up banks in the City of London, and eventually became very wealthy and powerful members of the British aristocracy. In 1803, when Napoleon needed money for his wars and offered to sell Louisiana to the USA for $15 million, Barings lent the USA the money to pay him; so Louisiana became part of the USA instead of belonging to France. After Napoleon's defeat in 1815, when Barings raised a loan of 315 million francs for the new French government, the Duc de Richelieu said "There are six Great Powers in Europe: England, France, Prussia, Austria, Russia and Baring Brothers". Barings Bank continued to trade until 1995, when the loss of £860 million by one of its traders betting on "derivatives" in Singapore brought the famous 200-year-old bank to an inglorious end (Chapter 5).

Nathan Rothschild set up a bank in London in 1809. His four brothers also had banks - in Frankfurt, Paris, Vienna and Naples. He used the family's network of couriers to supply Wellington's armies with money in the war against Napoleon. They also brought him very useful news. When Napoleon lost the battle of Waterloo, Nathan heard about it before anyone else at the London stock exchange. He immediately sold all his British government stocks, so that everyone else would think Napoleon must have won and sell their shares too. They did, the price of the shares fell, Nathan bought them up cheap, and made a fortune. He then became a very successful international banker. By 1832 he was speaking for the City of London: "This country is the Bank for the world... All transactions in India, in China, in Germany, in the whole world are guided here and settled through this country". Rothschilds played a big part in the California Gold Rush (1849), in the British Government gaining control of the Suez Canal (1879), and in financing railways around the world. The Rothschild Bank still exists today.

Taxes and Trade in the Industrial Age

The effect of taxes on trade often creates dispute. Today there is a dispute about European taxes on food from developing countries. This restricts their exports to us, while we press them to accept exports from us. In the 19th century there was a similar dispute in Britain. The tax on wheat imported from other countries had made it expensive and restricted the amount imported. This protection against foreign competition kept prices and profits high for British landowners and farmers. But the new industrialists in the cities wanted food to cost less, so that they could pay their workers lower wages, reduce business costs, and sell more machines and other industrial goods at home and abroad. They won the argument and got the tax abolished in 1846.

This "repeal of the Corn Laws" was seen as a historic event: Britain had left the agricultural age and entered the industrial age. It was a victory for "free trade" over "protectionism", letting the nation's consumers buy things more cheaply instead benefiting home producers by keeping prices up. But it also showed that, while free trade is good for some people, it is bad for others. The anti-globalisation movement today argues that it unfairly benefits rich countries at the expense of poorer ones.

Opposition to Capitalism

The poverty of working people in European cities in the 19th century was so bad that in 1848 the French political philosopher Alexis de Tocqueville (1805-1859) said, "We are sleeping on a volcano... A wind of revolution blows, the storm is on the horizon". In that same year Karl Marx (1818-1883) and Freidrich Engels (1820-1895) published the Communist Manifesto, and revolutions took place in France, Germany, Italy and Austria-Hungary. They were all stamped out. For Karl Marx, this confirmed the lesson of Britain's parliamentary reform in 1832: when the middle-class owners of capital had achieved their political aims, they would no longer help working people to achieve theirs. His book Das Kapital convinced many people that, under capitalism, money was used to exploit workers in Europe and the subject peoples of European colonies. After that, trade unions grew up to campaign for better wages and conditions for workers; communists ruled Russia for seventy years after the 1917 revolution; and many socialist governments have been elected elsewhere since the end of the Second World War. But socialism has not reformed the money system; and how it works and could be improved is still a great mystery to most of the world's people.

The alternative institutions of the 19th century like building societies, which grew up to enable working people to club together to borrow money to buy their houses, have mostly now become absorbed in today's mainstream system of money and finance. Today's alternative financial initiatives are rather different (see Chapter 9).

CHAPTER 8
The Rise of America and The One-World Economy

In the 18th century when Britain ruled an immense colonial empire, the British government refused to let its American colonists have a currency of their own. Disputes with Britain about this, and about taxes, provoked the Americans to fight successfully for their independence in 1776. That link between money and freedom helped to shape their outlook on life.

After independence America grew and developed its resources with astonishing speed. For example, 100 squatters at Chicago in 1830 became "the first city of the prairies" with more than half a million people in 1880 and a million in 1890. By then, little more than a century after the Declaration of Independence had declared "all men are created equal", the "Robber Barons" were creating huge fortunes with ruthless enterprise, paying rock-bottom wages to thousands of immigrant workers from Europe. One of these tycoons of the railway age was John D Rockefeller (1839-1937). He set up Standard Oil, became the USA's first billionaire, and gave $500 million to medical research. Another was Andrew Carnegie (1835-1919). He came from Scotland as a boy in 1848 and built up a huge steel industry. Then, saying it was disgraceful if a man died rich, he gave away $400 million, including the cost of three thousand public libraries in America, Britain, Europe and Africa. A third was the banker John Pierpont Morgan (1837-1913). He bought up half the American railway system and raised $1.4 billion to buy out Carnegie's steel business. A popular song called him "Morgan, Morgan, the great Financial Gorgon". He symbolised the power of American money.

Between the Wars

In the period between the beginning of the first World War (1914-18) and the end of the second (1939-1945) the USA replaced Britain as the world's financial superpower. It was also a period of unusually severe money disasters.

The Great Crash on the New York stock market in 1929 (Chapter 5) might seem the most dramatic. But in Germany in the early 1920s runaway inflation had meant that money lost its value and became almost worthless. The prices of everything went sky high. People rushed to the shops with wheelbarrows full of almost worthless banknotes to spend all their wages and savings as fast as they could, before their money lost every bit of its value.

This led to the problem of the Gold Standard. Within a country the Gold Standard had required banks to give gold in exchange for banknotes if their customers asked for it. In trade between countries it had meant that a country receiving payments in the currency of another could require the paying country to give gold in exchange for its currency. When the Gold Standard was dropped in the 1914-18 war, money no longer had to be exchangeable for gold, and that allowed more paper money to be created and put into circulation.

In the 1920s various countries tried restore the Gold Standard, in order to keep up the value of money and avoid inflation. But that led to less money in circulation, and that damped down economic activity and employment. This caused problems no less than inflation had done. In Britain, for example, Winston Churchill's decision as finance minister in 1925 to restore the Gold Standard caused nationwide pay cuts and a General Strike of all workers. The Gold Standard was suspended again in 1931.

All these problems contributed to worldwide economic crisis and very high unemployment in the 1930s. In America President Roosevelt brought in the "New Deal". It invested large sums of government money in projects to create jobs, including big dams, big power stations and many smaller community schemes. The celebrated economist John Maynard Keynes (1883-1946) proposed this for Britain and other countries, and "Keynesian economics" strongly influenced government policies in many countries until the 1970s. But what actually ended the economic slow-down of the 1930s was massive government spending on armaments for the second World War.

Since Bretton Woods

In July 1944, when the second World War was nearly over, an international conference met at Bretton Woods in the USA to decide how the post-war international money system could avoid repeating the disasters of the inter-war years. It resulted in setting up the International Monetary Fund (IMF) and the World Bank, and much later the World Trade Organisation (WTO). These bodies are controlled by the USA and other rich and powerful countries as separate organisations from the United Nations itself. Keynes argued that a proper international currency was needed, which would not belong to any single nation. The Americans said No. They wanted to be top financial superpower, with the US dollar replacing Britain's pound as the main international currency. The other countries, bankrupted by the costs of the war, had to agree.

A link was kept between the world's money and gold until 1971. Exchange rates between other countries' currencies and the US dollar were fixed, and the USA was obliged to meet requests from other countries to give them gold at a price of $35 an ounce in exchange for US dollars which they had earned in international trade. Even today the bullion depository of the US Mint at Fort Knox holds 143.7 million ounces of gold valued at $42.22 per ounce - a total value equal to about 4.6 billion euros. In 1971, however, the USA under President Nixon found it could no longer repay other countries with gold for all the dollars they were now earning, and the remaining link between the world's money and gold was scrapped. National currencies now "float" against one another in value; for example every day the euro goes up or down a certain amount compared with the dollar.

In today's huge market for trading national currencies internationally, only a tiny proportion of the transactions are connected with real trade between countries in things like oil or coffee or machinery. The rest - over 2 $trillion worth a day - aim to make profit from buying and selling currencies in exchange for one another. When everyone decides to sell a particular currency its value can collapse, destroying businesses and jobs in the country to which it belongs.

Because the US dollar is no longer linked to gold there is no limit to how many dollars the USA can create for other countries to use for international trade and investment. Creating money that other people have to use brings in a profit called "seigniorage" (see Chapter 3), resulting in other countries now paying an estimated $400 billion a year to the USA. This is a feature of the world's present money system which prevents poor countries paying off their debts and stifles their development. More generally, people in the growing worldwide "anti-globalisation movement" regard today's international money system as a particular cause of injustice and poverty. They see the world economy as if it is a game, with rules (based on international treaties and regulations) and scoring system (based on the international money system) unfairly designed by the biggest players to enable them to win.

Since the euro came into existence in 2002 some people have suggested it should capture a good share of the profit now enjoyed by the US dollar for providing the world's main international currency. But perhaps a genuinely international currency, belonging to all the world's people would be a more efficient and fairer way to meet our international trading and investment needs, as was suggested but rejected at Bretton Woods over sixty years ago. That idea will probably grow stronger in the coming years.

Chapter 9
History in the Making

Small is Beautiful

In the early 1930s, when economic activity was at its lowest and unemployment at its highest in many countries, a man called Michael Unterbuggenberger lived in the small town of Worgl, between Salzburg and Innsbruck in Austria. As burgomaster he persuaded the town to issue local money in the form of tickets ('scrip') corresponding to one, five and ten Austrian schillings. It put these new local banknotes into circulation by paying them to unemployed people for building and repairing local streets and drains and bridges; they spent the notes in the shops; and the shopkeepers paid their local taxes and their local suppliers with them.

This new currency led to a dramatic increase in economic activity, which was partly due to a special feature of the notes. They lost 1% of their value every month, unless their holders attached a stamp bought from the town council. People were eager to spend them as soon as possible before they lost value - which increased what economists call the "velocity of money"; the sooner people spend it, the faster it circulates. But the scheme had a sad end. The Austrian National Bank suppressed it, fearing that successful local currencies would threaten its central control over the country's money. Many US local currencies suffered a similar fate; the New York bankers persuaded President Roosevelt to outlaw them in 1933.

Recently there has been a revival of local currencies and local community banks in many countries, in reaction against excessive local dependence on remote government agencies to provide money for public services and on big businesses like supermarket chains to provide local people with food and other goods, and jobs that pay their wages. The new currencies, described as 'regional', 'alternative', 'community', 'complementary', 'barter', and 'scrip', include some called Systemes d'Echange Locaux (SEL) in France, Local Exchange Trading Systems (LETS) in various English-speaking countries, and Time Dollars in the USA. In Eurozone countries interest in these currencies has grown since national currencies like the franc were replaced by the Euro and the European Central Bank. They could play a significant part in the later 21st-century world economy.

Money Values in Conflict with Ethical Values

Another feature of recent years is the growing number of people who want their money to support purposes which they approve. In *spending* their money, they are not just trying to buy things as cheaply as possible, but to be ethical consumers - for example buying energy-saving refrigerators and freezers and other household goods, or 'fair trade' products like coffee imported at fair prices from people in poor countries. In *saving and investing* their money, too, they are not trying just to make more money, but to be ethical investors - for example investing in companies that treat their workers well, or help to conserve the environment, or provide goods and services that contribute to the health and well-being of their customers. In *earning* their money, also, they are not just wanting a well paid job, but the satisfaction of doing good work which is useful to other people, as well as bringing in enough income to meet their own and their family's needs.

Increasing numbers of businesses are also becoming seriously involved in 'business ethics' and 'corporate social and environmental responsibility' - not just aiming to make profits, but also to make a valuable contribution to the wellbeing of people and the natural environment. Unfortunately, as a top-level European Union conference reported in December 2005, this does not apply to the big banks and other financial companies whose business is dealing with money. Their critics say they continue to take no responsibility for the effects of their lending and investing, and that their determination to make high profits worsens world problems like climate change and poverty.

This growing concern about using money ethically raises an important question: Why are money values so often in conflict with ethical values? A religious answer might be: Because people are selfish and sinful. But the history of money offers a more practical explanation and a pointer to a better future.

Understanding how the Money System Works

The system of money today is biased against ethical values because it was developed to serve the interests of people who wanted greater power and wealth for themselves. Understanding this and looking at how it leads in practice to undesirable outcomes today, shows that that is largely due to the way in which national governments carry out their key responsibilities for money. Those are:

- to ensure that a reliable *money supply* is in circulation for everyone to use;
- to collect money as *public revenue* through a variety of taxes and charges; and
- to manage *public spending* to meet a variety of public needs.

Taxing things makes them more expensive; that discourages people from using them and producing them; cigarettes are an example. On the other hand, spending public money on things makes them cheaper or even free; that encourages people to use them and increases the number of people employed to provide them; public education and health services are examples. In democratic countries like France and Britain today taxation and public spending by national governments account for around 40% or 50% of the total value of everything produced - which economists call Gross Domestic Product (GDP). The way new money is created also influences who gets to spend it on what and who profits from it.

So the way a government carries out these three functions affects the prices of everything in the economy - even things that, although untaxed or unsubsidised themselves, benefit or suffer in competition with others that are taxed or subsidised. The conflict between money values and ethical values arises because modern democratic governments have not yet systematically reformed the existing way of creating new money and the existing patterns of taxation and public spending, in order to encourage the majority of people to serve their own interests in ways that also serve the interests of other people and the natural world.

But awareness of the need for that is beginning to spread. The idea that central banks should provide the money supply as a public service and no longer allow commercial banks to create it as a source of profit for themselves is gaining support. So is the idea of a "tax shift". This would tax people and businesses less on the incomes and profits they get as rewards for useful work and enterprise, and more on what they take from the value of common resources - for example by profiting from rising land values or using the environment as a dump for waste and pollution. On public spending, there is growing support for paying everyone a basic income as their share of the value of common resources, instead of paying businesses big money to provide public services and paying 'perverse' subsidies to encourage businesses and people to use more fossil fuels instead of less on things like transport and farming. The need is also increasingly recognised for properly organised global taxation, global public spending and a genuinely global currency, to counteract the domination of the world economy by transnational business and money.

The next chapter in the history of money may record local, national and international changes like these. Looking back from the end of the present century, they would be seen to have encouraged new patterns of production, transport, trade, work and family life - more efficient, fairer for the people of the world and their well-being, more sparing of the earth, and more fairly sharing the value of earth's resources.

CONCLUSION

The origins of money are veiled in myths. Today, for most people, how money works is still shrouded in mystery. Most young people will want to understand it well enough to know how best to manage money for themselves and their families. Also, as citizens of their localities and countries and the world, many will want to understand how money could serve people's interests better than it does today.

The history of money encourages a critical frame of mind. Kings and governments; bankers, traders and merchants; and professionals working for them - all have aimed to develop money to serve their own interests, not the interests of their fellow citizens. Silver mining and gold mining have meant cruel deaths to millions of people. The introduction of paper money and electronic money and direct payment of money between different bank accounts have all in turn been used by banks to conceal that they create new money out of nothing as profit-making loans. That way they have turned what should be public revenue into private profit, and burdened people and businesses and governments with constantly growing debts. Rich countries have developed the international money system to serve their interests at the expense of poor countries.

The thing to keep in mind is that that is why the system of money now works as it does. The way it works will have to be changed for it to become a scoring system for a fairer game of economic life which serves the interests of most people. To make that happen is an important challenge. After all, the system of money is the scoring system for a game everyone has to play. The history of money is a work in progress.